# West Virginia Department of Environmental Protection Division of Air Quality

# Fact Sheet



# For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-07100001-2015**Application Received: **May 19, 2014**Plant Identification Number: **071-00001** 

Permittee: Greer Industries, Inc. d.b.a. Greer Lime Company

Facility Name: **Riverton Facility** 

Mailing Address: 1088 Germany Valley Limestone Road, Riverton, WV 26814

Revised: N/A

Physical Location: Riverton, Pendleton County, West Virginia

UTM Coordinates: 640.00 km Easting • 4293.00 km Northing • Zone 17

Directions: Approximately two (2) miles south of Seneca Rocks (Junction US Route

33 and WV Route 55) on US Route 33, turn left onto Germany Valley

Limestone Road.

#### **Facility Description**

Greer Lime Company (SIC Codes 3274, 1422 and NAICS Codes 327410, 212312) operates a limestone quarry, crushing and sizing operation, limestone grinding system, storage and loadout systems of various lime and limestone products, hydrate plant, two (2) rotary lime kiln systems, lime handling system, and a portable limestone crushing and sizing facility. The maximum capacity of the plant is 800 tons per hour and 1,500,000 tons of stone per year. The facility has the potential to operate twenty-four (24) hours a day for seven (7) days per week for fifty-two (52) weeks per year.

# **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]				
Regulated Pollutants	Potential Emissions	2013 Actual Emissions		
Carbon Monoxide (CO)	160.40	60.88		
Nitrogen Oxides (NO <sub>X</sub> )	301.39	255.7		

Regulated Pollutants	Potential Emissions	2013 Actual Emissions
Particulate Matter (PM <sub>2.5</sub> )	172.40	58.23
Particulate Matter (PM <sub>10</sub> )	186.02	62.83
Total Particulate Matter (TSP)	399.49	267.13
Sulfur Dioxide (SO <sub>2</sub> )	134.6	6.46
Volatile Organic Compounds (VOC)	37.72	9.73

 $PM_{10}$  is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2013 Actual Emissions
$HC1 + C1_2$	37.22	33.54
HF	4.05	4.05
Total HAPs	41.61	37.99

Some of the above HAPs may be counted as PM or VOCs.

# **Title V Program Applicability Basis**

This facility has the potential to emit 160.4 tons per year of CO, 301.39 tons per year of NO<sub>x</sub>, 186.02 tons per year of PM<sub>10</sub>, 134.6 tons per year of SO<sub>2</sub>, and 37.22 tons per year of HCl. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single HAP, and 25 tons per year of aggregate HAPs, Greer Lime Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR5	PM limits for Coal Operations
	45CSR6	Open burning prohibited
	45CSR7	PM limits for Manufacturing Operations
	45CSR10	Limits for Sulfur Oxides
	45CSR11	Standby plans for emergency episodes
	45CSR13	Constructions Permits
	45CSR16	NSPS Standards
	45CSR29	Submission of VOC and NO <sub>x</sub> Emissions
	45CSR30	Operating permit requirement
	45CSR34	MACT Standards
	WV Code § 22-5-4(a)(14)	The Secretary can request any pertinent information
		such as annual emission inventory reporting
	40 CFR Part 60 Subpart Y	NSPS for Coal Preparation Plants
	40 CFR Part 60 Subpart HH	NSPS for Lime Manufacturing Plants
	40 CFR Part 60 Subpart OOO	NSPS for Nonmetallic Mineral Processing Plants
	40 CFR Part 61	Asbestos inspection and removal
	40 CFR Part 63 Suboart AAAAA	MACT for Lime Manufacturing Plants
	40 CFR Part 82, Subpart F	Ozone depleting substances

State Only: 45CSR4 No objectionable odors

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 CFR Part 60 (NSPS), 40 CFR Part 61 (NESHAPs), and 40 CFR Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 et seq., 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That  Affect the Permit (if any)
R13-1396C	August 29, 2013	
R13-1381A	May 25, 2004	
R13-1685	February 10, 1994	
R13-1788	April 24, 1995	
R13-2113J	June 22, 2011	
R13-2222-P2	March 19, 2002	
R13-2670B	May 1, 2014	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

This is a second renewal. The following changes have been made:

- 1. The Equipment Table and corresponding Section headings have been revised to remove slide gates and rotary air locks from being listed as emissions sources. These units are not emissions sources by themselves. The emissions are from the actual transfer of material from one piece of equipment to another and are included as a transfer point.
- 2. In the portable plant (Group 008), there are two take-away belts located on the underside of the screens. These belts are integral to the screen units. BC5 is underneath of Screen PS1, therefore PS1 and BC5 emission points have been listed together. BC12 is a conveyor that is inherent to Screen PS2 which has not been identified as an independent conveyor, therefore BC12 has been added with PS2.
- 3. The listing of tanks (Group 010) has been deleted since they have no applicable requirements. Overall emissions from the tanks are estimated at 0.27 tons per year with an average hourly emission value based on 8,760 hours per year of 0.06 pounds per hour. This group is therefore considered an insignificant activity.
- 4. There were two off permit changes since the last permit renewal. Two diverters were added in 2011 and have been added to the Equipment Table in the Fine Grinding Group (Group 011). A vacuum

system at the bagging unit was added in 2013, however this unit has emissions less than 1 pound per hour and less than 10,000 pounds per year and is therefore considered an insignificant activity.

- 5. Section 3.0 In condition 3.2.1., the annual visible emission observations requirement conflicted with the quarterly inspections requirement in paragraph a., therefore the visible emission observations were increased to once per calendar quarter. In addition, the requirement to conduct visible emission observations for a "sufficient time" was deemed unenforceable, therefore the time interval was changed to five minutes, with the exception of equipment subject to and listed in Condition 3.2.3.
- 6. Section 4.0 Added Condition 4.1.6. to address equipment that had been listed in Condition 6.1.7.
- 7. Section 5.0 Belt Conveyor, 11-BC-3, Open Stockpile, 2-OS-2, and Fuel Tank, 11-FT-1, were removed from the Emission Point ID heading because they are not in the Equipment Table and/or do not have applicable requirements. Condition 5.1.1 citation was revised to delete 2-OS-1 because it is not in the Equipment Table and represents an old R13 equipment ID. Deleted old Condition 5.4.1. because it was redundant with 5.4.2.
- 8. Section 6.0 Dump Hopper 5-DH-1, Vibrating Feeders 5-VF-1, 5-VF-2, Coal Grinder 5-CR-1, Coal Silo 5-SI-1, and Belt Conveyors 5-BC-0, 5-BC-1 have been removed from the Emission Point ID heading because they are covered under Section 11.0.
- 9. Old Condition 7.1.17. was deleted because it is redundant with Condition 6.1.7. Added Condition 7.4.3. to reference Condition 6.4.3. for SO<sub>2</sub> recordkeeping requirements.
- 10. Conditions 6.3.4. (former condition 6.3.5.) and 7.3.4. Information about test results has been removed from the permit and placed here in the Fact Sheet because testing may occur multiple times during a permit term and results may not be current. Tests for nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) from 4-RK-1 and 4-RK-2 were conducted in October of 2013. NO<sub>x</sub> tests resulted in mass emission rates between 50% and 90% for each test. The results of those tests showed that the current NO<sub>x</sub> testing frequency is "Once/3 years." CO tests resulted in mass emission rates between 50% and 90%. The results of this test showed that the current carbon monoxide (CO) testing frequency is "Once/3 years."
- 11. R13-2670B was issued on May 1, 2014 and authorized the addition of two open coal stockpiles. The changes from this revision are included in Section 11.0 of the renewal permit. Equipment IDs 5-CS-1A and 5-CS-2 were added to the Equipment Table and Section 11.0 heading because they have applicable requirements under 45CSR13, 45CSR5, and 40 CFR § 60.254(c). Conditions 11.3.2. and 11.4.4. were added to incorporate testing and recordkeeping requirements from the NSPS.
- 12. Appendix A, containing the 45CSR10 Monitoring Plan, was edited to remove requirements for Buckeye Asphalt (061-00126), Cascade Asphalt (033-00138), Greer Asphalt (061-00023), and Clarksburg Asphalt (033-00023), as they are not part of this Title V permit for Greer Lime Company (071-00001).
- 13. Appendices D, E, and F have been removed since these are example, but not required, forms from NSR permits for recordkeeping. References to these example forms have been revised to reference the associated NSR Permit.

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR§10-5.1 This process is not defined as a refinery process gas stream or any other process gas stream that contains hydrogen sulfides to be combusted.

45CSR17 Greer Lime Company is subject to 45CSR7 which exempts it from

Greer Lime Company is subject to 45CSR7 which exempts it from 45CSR17, To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter, as stated in 45CSR§7-10.2.

40 CFR §§60.380 - 60.386 Standards of Performance for Metallic Mineral Processing do not Subpart LL apply because lime or limestone is not a metallic mineral.

40 CFR §§60.674(a) and 60.676(c), These sections of 40 CFR Part 60 Subpart OOO do not apply to (d), and (e)

Greer Lime Company since Greer Lime Company does not incorporate a wet scrubber in their manufacturing process.

40 CFR §§60.730 - 60.737 Standards of Performance for Calciners and Dryers in Mineral Subpart UUU Industries do not apply because lime is not listed as a mineral processed or produced in a mineral processing plant.

40 CFR 64 This is a second renewal for this facility. CAM for existing equipment was addressed in the first renewal.

The two rotary kilns have uncontrolled potential to be Title V major for PM, however they are subject to 40 C.F.R. 63 Subpart AAAAA standards, which were proposed after 11/15/1990 and therefore, exempts the pollutant specific emission unit "PSEU" from "CAM".

The new coal handling system (5-DH-1, 5-VF-1, 5-BC-0, 5-CR-1, 5-SI-1, 5-VF-2, 5-BC-1, 5-BC-2 and 5-BC-3) employs only passive control measures to meet the opacity requirements of 40 C.F.R. Part 60 Subpart Y and therefore, do not employ any add on control equipment that would require CAM monitoring.

The new as well as the existing fine grinding lines (Group 11) do not encompass any individual PSEU having pre-controlled emissions exceeding major source thresholds for Title V.

The new open coal stockpiles (5-CS-1A and 5-CS-2) authorized by R13-2670B employ only passive control measures to meet the opacity requirements of 40 C.F.R. Part 60 Subpart Y and therefore, do not employ any add on control equipment that would require CAM monitoring.

#### **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

(CAM)

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: April 9, 2015 Ending Date: May 11, 2015

#### **Point of Contact**

All written comments should be addressed to the following individual and office:

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## **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

## Response to Comments (Statement of Basis)

Not applicable.